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AGRICULTURE

No. 74



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CHINA REPORT AGRICULTURE

No. 74

	CONTENTS	PAGE
ı.	GENERAL INFORMATION	1
	National	
	Superior Hybrids of Soft, Fragrant, Purple Rice Varieties Discussed	
	(Li Zhengyou; XIANDAIHUA, Mar 79)	1
	Wide Use of Isotope Techniques in Agriculture Urged	
	(GUANGMING RIBAO, 21 Jan 80)	3
	Briefs	
	Commune, Brigade-Run Enterprises	5
	Rubber Production	5 5 6 6
	Edible Oil Processing	5
	Hybrid Rice Area, Output	6
	Anticolibacillosis Sheep Vaccine	6
	Anhuí	
	Briefs	
	Spring Farming	7
	Circular on Tobacco	7
	Beijing	
	Good Results Achieved in Beijing Livestock Production (BEIJING RIBAO, 9 Jan 80)	8
	Briefs	
	Beijing Vegetable Cold Storage	10
	Beijing Chicken Farm	10
	- a - [III - CC - 82]	

CONTENTS (Co	ontinued)		Pag
Fujian			
Brie			
	Fujian Prefecture Rape Crop		11
	Fujian Commune, Brigade-Run Enterprises		11
	Fujian Spring Farming Fujian 1979 Harvests		11 12
	Agriculture Conference		12
Cuanada			
Guangdo	ong		
Brie			
	Guangdong Pineapple Production		13
	Guangdong Prefecture Fruit		13
	Guangdong Oil-Bearing Crops		13 13
	Guangdong Sugar Crushing Season Guangdong Farmland Improvement		14
	Guangzhou Joint Enterprise		14
	Guangxi 1979 Harvest Figures		15
	Guangdong January Cold Damage		15
	Guangzhou Commune, Brigade Enterprises		15
	Sprinkler Irrigation System		15
	Guangxi Prefecture Sugarcane Output		16
Guizhou	u		
Brief	fs		
	Animal Husbandry		17
Hebei			
Brie			
	Hebei 1979 Agricultural Figures		18
Henan			
Brie	fs	,	
	Henan Winter Wheat		19
	Henan Rural Grain Rations		19
	Farmland Construction		20
Hubei			
Brief			
	Agricultural Atomic Energy		21

CON	TENTS (Con	tinued)	Page
	Hunan		
	Briefs		
		Hunan Farmland Capital Construction	22
		Edible Oil Procurement Cotton Sowing	22 22
	Jiangsu		
	Double	Cropping, Triple Cropping Systems Discussed (Yang Ruichun, Zheng Lizhi; GUANGMING RIBAO,	
		14 Oct 79)	23
	Briefs	Commune, Brigade Enterprises	27
	Shaanxi	Communite, Brigade Enterprises	21
	SHAAHAI	,	
	Briefs		20
		Shaanxi Drought Circular Lantian County Agriculture	28 28
	Shanghai		
	Briefs		
		Pesticide Developed	29
	Sichuan		
	Briefs		
		Market Meat Sales Meat Supply Increases	30 30
	Tianjin		
	Briefs		31
		Tianjin 1979 Harvest Increases	31
	Xinjiang		
	Briefs	Xiniiang 1979 Rural Figures	32
		Xiniiang 1979 Rural Floures	31

CONT	NTS (Continued)	Page
	Yunnan	
	Briefs	
	Xiangyun County Agriculture Rape Production	33 33
	Zhejiang	
	Briefs	
	Cadre Training	34
	Afforestation Encouraged	34
	Sheep Hides, Rabbit Fur Production	34
II.	PUBLICATIONS	35
	Table of Contents of 'GUIZHOU NONGYE KEJI', January 1979 (GUIZHOU NONGYE KEJI, 20 Jan 79)	. 35
	Table of Contents of 'GUIZHOU NONGYE KEJI', April 1979 (GUIZHOU NONGYE KEJI, 20 Apr 79)	37

I. GENERAL INFORMATION

SUPERIOR HYBRIDS OF SOFT, FRAGRANT, PURPLE RICE VARIETIES DISCUSSED

Beijing XIANDAIHUA in Chinese No 1, Mar 79 p 20

[Article by Li Zhengyou [2621 6927 2589]: "Superior Varities of Soft, Fragrant and Purple Rice"]

[Text] The grains of soft rice are long and thin and when cooked have a degree of stickiness between that of polished glutinous rice and glutinous rice, very rich and tasty and heartily welcomed by the broad people. It is the primary foodgrain of the Dai nationality people of Yunnan.

Fragrant rice is a variety with a very rich fragrance which can be detected when the plants bloom. When cooked the fragrance is even greater. In some small villages when one family cooks it the whole village fills with the fragrance. Fragrant rice production is minor and it is grown only in a few Yunnan prefectures.

Purple rice is a valuable type of rice. The grains are a dark purple color and there are three types--glutinous, soft and sticky. The rice cooks up purple and has a good flavor. Purple rice is very nourishing, enriches the blood and some can even be used in setting broken bones. Consequently, the price of purple rice is high, about twice that of most other rice.

Although soft, fragrant and purple rice have excellent qualities, in the past the old varieties had some shortcomings. The stalk structure was not good, the stems were tall and large, the majority over 140 centimeters, and the leaves were broad, large and hung down loosely. If too much nitrogen fertilizer was applied the plant would fall over. Therefore, production was quite low, only 500-600 jin per mu. In addition, their cold resistance was low, so it could be planted only in southern Yunnan and in warm river valleys. These are late rice types, sensitive to light and are not suitable for growing in the latitudes and elevations where early and intermediate rice are grown. Simultaneously, they have inferior resistance to rice blast and rice white withering.

In the last few years, there has been cross-breeding of soft, fragrant and purple rice with several other varieties having superior qualities and the hybrid offspring having superior qualities were selected for propagation, finally producing a few ideal varieties and plant systems, such as Dianduan 409 soft, fragrant rice. this hybrid has short stalks about 100 centimeters long with close stalks, strong tillering, straight leaves and high productivity at about 800 jin per mu. With proper cultivation, production can exceed 1,000 jin per mu. The hybrid Diannong 9 polished glutinous rice has high productivity and strong cold resistance. Trial plantings in Yunan's Xundian county at elevations around 1,900 meters produced from 800 to 1,000 jin per mu. This permitted those cold places formerly unable to plant purple rice to be able to do so. This year it is also being test planted at 1,400 meters and is producing over 50 percent again as much as the local variety of purple rice.

11582 030: 4007 WIDE USE OF ISOTOPE TECHNIQUES IN AGRICULTURE URGED

Beijing GUANGMING RIBAO in Chinese 21 Jan 80 p 2

[Article by Planning Office of China Academy of Sciences, Xi'an Branch: "Expanded Use of Isotope Techniques in Industry and Agriculture Production Services Urged by the Northwest Institute of Water and Soil Protection, Chinese Academy of Sciences"]

[Text] The scientific and technological personnel of the Northwest Institute of Water and Soil Protection, Chinese Academy of Sciences have achieved success in the expanded use of isotopes in industry and agriculture production services.

Since 1973 this research group has conducted over 10,000 radiation tests on farm crops, trees and plants, fruit trees, vegetables, pharmaceuticals, silkworms and mulberries, fungi and insects, and foodstuffs. They have cooperated with those concerned and produced nine new wheat varieties and have indications of over 100 new or improved types and plants. They also have produced new types, varieties and improved plants of paddy rice, corn, gaoliang, rape, cotton, beets, peanuts, and beans. They also conducted research on farm crops to determine suitable dosages and factors inducing improvements to raise the rate of effectiveness. Moreover they used isotope tracers to study effective nitrogen fertilizer dosages, phosphate fertilizer changes, study tracer elements for fertilizer effectiveness as well as the effectiveness of spiral cordate houttuynia in fattening fish. All these studies were successful.

They cooperated with the Xi'an Chemicals Plant and the Shanghai First Mollen Mill in successfully performing two research projects. A key problem in the Xi'an Chemical Plant's production of Lujian [3048 4354] is calculating the amount of liquid chlorine produced. The personnel of this research group used cobalt 60% rays to help the plant solve this problem.

This new method requires little investment, operation and maintainence are simple and safe, it is very precise and has been heartily welcomed in the plant. The Shanxi First Woolen Plant had a problem in the past with the undulant fever germs which were not eliminated by the disinfectants. This seriously affected the workers' health and prevented improvement of the rate of production. The research group comrades cooperated with the woolen mill to radiate the wool with isotopes to kill the germs, with only minor effects on the wool. Using this basis they helped this plant to build a radiation shop, secured permission from the concerned departments who felt this solution to be reasonable and in accordance with directives regarding national standards. The disinfectant worked well and permitted production to reach the anticipated results.

COMMUNE, BRIGADE-RUN ENTERPRISES--In the past few years commune and brigaderun enterprises throughout our country have developed very rapidly. At the end of 1979 there were already more than 1.5 million commune and brigade-run enterprises which had been developed. This is an average of more than 30 per commune. The annual value of output for the enterprises accounts for one-third of the economic income of the communes. These enterprises include more than 30 types of enterprises such as machinery, chemical industry, light industry, communications, building materials and every type of breeding aquatics and cultivation activities. Workers and staff for these enterprises account for more than 20 million people. There are more than 7,000 types of products among which not a few are of superior, national quality and are in great demand in both domestic and foreign markets. These enterprises are playing an increasingly important role in developing the national economy. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 8 Jan 80 p 1]

RUBBER PRODUCTION--In 1979 a bumper crop in rubber from state farms in the four provinces of Guangdong, Yunnan, Guangxi and Fujian was achieved. Total output of dried rubber reached 97,400 tons, an increase of 4,600 tons over the year's plan of 92,800 tons. This was an increase of 4.9 percent. Compared to 1978's 95,100 tons, it was an increase of 2,300 tons, which was a 2.4 percent rise. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 12 Jan 80 p 1]

EDIBLE OIL PROCESSING--In 1979, grain and edible oil processing factories in various parts of China extracted more than 175 million jin of edible oil from rice bran and another 25 million jin from corn plumules, setting a new record. The output of these two kinds of edible oil is equivalent to the amount of oil extracted from 1.3 or 1.4 billion jin of soybeans. [Beijing Domestic Service in Mandarin 1200 GMT 4 Mar 80 OW]

HYBRID RICE AREA, OUTPUT--The work of popularizing hybrid rice in China has achieved a very big success. According to initial statistics, the planted area of hybrid rice in 1979 was expanded to 76 million mu, increasing the output of rice by 7.8 billion jin. This accounted for approximately one-third of the total increase in grain production in China in 1979. [Text] [Hong Kong ZHONGCUO XINWEN in Chinese 8 Feb 80 p 2]

ANTICOLIBACILLOSIS SHEEP VACCINE--Xining, 7 Mar--Chinese researchers in veterinary medicine have succeeded in developing a new vaccine to provide immunity against colibacillosis in sheep. It is a kind of attenuate live vaccine against colibacillosis. In experiments conducted with more than 200,000 head of sheep, the new vaccine has proved to be both effective and safe. Immunity can last 6 to this. The disease is endemic in stock-breeding areas on the Qinghai-Tibetan flateau in winter and spring. The new vaccine is applied in aerosol form. The receive is sprayed over a flock of sheep, which breathe in the mist-like vaccine and thus acquire immunity. In developing the new vaccine more than 1,000 generations of colibacillus had been bred over the past 5 years by the scientists of the Qinghai Institute of Animal Husbandry and Veterinary Medicine, working in conjunction with specialists from other units. [Beijing XINHUA in English 1200 GMT 2 Mar 80 OW]

SPRING FARMING—The financial and trade departments in Anhui Province are concentrating manpower and funds on supporting spring farming. Arrangements have been made by agricultural banks to distribute some 500 million yuan of agricultural loans to grassroots units. The total amount of money used for supporting agricultural production increased by 770,000 yuan over 1979. Plans are also being made to supply an additional 100,000 tons of fertilizer for wheat and some 20 million jin of fertilizer for flue-cured tobacco production to communes and production brigades by early April. Some 12 million jin of early rice seeds and 13 million jin of late rice seeds have already been distributed to local units in Luan, Chuxian and Chaohu prefectures where rice seeds are in short supply. [OWO41037 Hefei Anhui Provincial Service in Mandarin 1100 GMT 2 Mar 80 OW]

CIRCULAR ON TOBACCO--The Anhui People's Government has twice issued a circular calling on all localities to do a good job in the production of flue-cured tobacco in order to meet demands of the domestic and foreign markets. The circular calls on leading groups in tobacco-producing areas to assign a responsible comrade to supervise the production of such tobacco. It urges all units concerned to investigate production and solve any problems discovered. The circular also gives guidelines on prices of tobacco, coal supply for tobacco production and other related questions.

[OW270107 Hefei Anhui Provincial Service in Mandarin 1100 GMT 26 Feb 80 OW]

TOWN HOURS ACKIEVED IN BEIJING LIVESTOCK PRODUCTION

Deijing REIJING RIBAO in Chinese 9 Jan 80 p 1

Insigned article: "Good Results Achieved in Beijing 1979 Livestock Production: Purchases of Pork, Fresh Eggs, Peijing Duck and Chickens up Two Percent, 59 Percent, 22 Percent and 8 Perdent Respectively; The Municipal Livestock Work Committee Summed Up the 1979 Experiences and Formulated 1980 Plans"]

Elext? The 1979 Beijing livestock production attained obvious success. The city purchased 1.87 million hogs, a 2 percent increase over 1978; 43 million fresh eggs, 59 percent over 1978; 4.11 million Beijing ducks, 22 percent over 1978; and 1.94 million chickens, 8 percent over 1978. Of these, pork and fresh egg purchases fulfilled the year's quota ahead of time and runched a new historical record. Cattle and sheep production reversed a 10 year downward trend while quail and marten production also made gradual developments.

These figures were released at last year's Beijing Livestock Tark Conference, chaired by the Revolutionary Council Secretary and Deputy Mayor Mang Chun [3769 4783], who also spoke at the conference.

The conference heard the experiences of a number of advanced proups and individuals and summed up the reasons leading to the great success obtained in Beijing livestock. Last year, the broad suburban cadres and commune masses sincerely implemented the spirit of the Third Plenum and implemented the spirit of the party central's two documents concerning the problem of actually developing true standards, criticism of the ultraleft line of Lin Biao and the "gang of four," eliminating superstition, liberating ideology and clearly distinguishing right and wrong. From this basis many prefectures (areas), communes, brigades and production teams proceeded from the true applications, suited measures to local conditions to resolve the agriculture-animal husbandry contradiction, the forestry-animal

humbandry contradiction, and the contradictions within animal husbandry itself, adjusted management policies, eschewed "amalitarinariam," and developed whatever was suitable for development. They transformed the previous one-sided style of emphasis on foodgrains production and neglect of livestock production, or the emphasis on hog production only and neglect of fodder livestock. They attained an equal grasp of agriculture, forestry and animal husbandry and guaranteed the implementation of the policy of "taking foodgrains as the key link, fullscale development and suiting measures to local conditions "to promote development in every production sector. Many areas energetically grasped management principles, correctly handled the relationships between the state, collective and the individual, implemented the party policy of "from each according to his ability, to each according to his work," overcame the egalitarian tendency in distribution, established a complete sentry-post responsibility system, closely united the development of production with the inter sts of the individual workers, instituted rewards and punishments, carried out rewards and punishments, motivated the masses' enthusiaism and reversed the losses suffered in production. A large number of hor farms lost money on hog raising and there emerged a large number of families and individuals raising hogs and superior hors. Hany areas also pay attention to the training of livestock production personnel, conduct many scientific experiments, reorganize the livestock, develop artificial insemination, take disease prevention measures on time, and protect the healthy growth of beast and fowl.

The conference discussed the production plans for this year. The comrades attending the conference pointed out: we must advance in implementing party policy, thoroughly predict the possible problems and obstacles facing implementation of these policies and sincerely seek solutions for them. Completely effective steps must be chosen, especially the overall establighment of a complete responsibility system, one which includes individual and household responsibilities and thoroughly arouses mass enthusiaism. We must take steps forward in strengthening mountain area construction and developing animal fodder production. The leadership must deeply enter practice, conduct investigations and research, sum up and spread advanced experinnce, use selected units to lead the general work sector, focus on grasping group construction, grasp management operations, and grasp scientific feeding in order to guarantee complation and overfulfillment of the 1980 tasks and attain even reater results.

11572

BEIJING VEGETABLE COLD STORAGE--Ten new cold storage [facilities] for vegetables have been constructed in the city, suburbs and counties of the Beijing Municipality. Total area is 103,000 square meters with a storage capacity for 50 million jin of vegetables. These cold storage [facilities] were designed and constructed by the Beijing Municipal Commerce Department itself. Some are built above ground, others are partially in the ground. Inside the storage [facilities] are refrigeration and ventilation equipment. There are two passageways for bringing in produce. Large trucks with packaged vegetable can go directly to the loading and unloading docks. [Excerpt] [Hong Kong ZHONGGUO XINWEN in Chinese 26 Jan 80 p 1]

BELJING CHICKEN FARM--The Beijing Municipal Red Star Chicken Farm--our country's own designed, large scale, mechanized chicken farm--achieved new successes with last year's production. The farm supplied the state with 4.53 million jin of commercial eggs, an increase of 1.23 million jin over that in 1978. This accounted for one-tenth of the annual procurement for the municipality. Profits turned over to higher authorities amounted to 1.2 million yuan, an increase of 500,000 yuan over that in 1978. Calculated on the number of poultry raisers directly involved in production, each person on the average supplied 56.62 tons of commercial eggs and 30,000 yuan of profits. [Text] [Beijing RENMIN RIBAO in Chinese 4 Feb 80 p 2]

FUJIAN PREFECTURE RAPE CROP--Ningde Prefecture produces more than one-half of Fujian's rape. In 1979 the output of rapeseed in this prefecture was 9 million jin which produced 2.16 million jin of oil. This was a 27 percent increase over the high production year of 1977. Rapeseed output in Fuan County which produces over one half of the prefecture's rapeseed increased 23 percent over the previous historical high. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 31 Dec 79 p 7]

FUJIAN COMMUNE, BRIGADE-RUN ENTERPRISES—The total income of commune and brigade—run enterprises in Fujian in 1979 increased more than 30 percent over 1978. Capital which was collected solely from the profits of commune and brigade—run enterprises to be used to support agriculture amounted to more than 70 million yuan. At present, commune members employed by these enterprises account for 12 percent of the total agricultural labor force for the whole province. The majority of these enterprises were developed after 1976. Nearly 900 rural communes and 80 percent of the brigades in the province basically run enterprises. Last year products from the commune and brigade—run enterprises accounted for one—fourth of the total exported items from the province. [Excerpts] [Hong Kong ZHONGGUO XINWEN in Chinese 18 Jan 80 pp 1-2]

FUJIAN SPRING FARMING--Fujian's peasants are already engaged in spring preparation and sowing activities. In the southern area where the season comes earlier, the sowing of early rice and the planting of early potatoes has already begun. At present Longxi Prefecture has soaked more than 110,000 mu and sown the first batch of early rice seed. The province has also paid attention to fertilizer resources. Since the beginning of last year many counties have made arrangements for 20-30 percent of the labor force to collect fertilizer. Putian Prefecture has an average of 200,000 people participating daily in fertilizer collection. Up to the present, 70 dan of fertilizer has been collected for each mu of early rice. Longxi and Longyan prefectures have established more than 16,800 mu of base fields for duckweed, a green manure. Longyan and Sanming prefectures have already plowed 90 percent of their winter fallow fields since "Spring Begins" [5 February]. This has put spring farming and sowing on an excellent base. [Beijing RENMIN RIBAO in Chinese 18 Feb 80 p 1]

FUJIAN 1979 HARVESTS--In 1979 Fujian agriculture achieved a bumper harvest. Total grain output increased by 4.35 percent over 1978 with an average per mu yield reaching 913 jin which was an increase of more than 40 jin over 1978. Except for peanuts and jute which declined in output, the important economic crops of rape, sugarcane, tobacco, tea leaves and fruit all increased in output in 1979. Rape output increased by 57 percent, tobacco by 24 percent, sugarcane by 10 percent and tea leaves by 5.8 percent. Animal husbandry also saw rapid development in the province. From January to October 1979, the number of hogs, cattle, sheep and goats, fresh eggs and amount of honey already procured by the province had increased from 7.4 percent to more than 300 percent, respectively, over 1978. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 28 Dec 79 p 3]

AGRICULTURE CONFERENCE—Recently, the Sanming Prefectural CCP Committee held a conference on agriculture. The participants had discussed and studied the measures for realizing all-round agricultural production this year. Despite reaping a bumper harvest of agriculture for 3 successive years, agricultural production in this prefecture is still not stable and the output is not high. The average per mu yield in one season is only 450 jin. The conference revealed that there are 1 million mu of low-yielding farmland in the prefecture. They pointed out if the output in each mu is increased by 100 jin, they can increase the output by 100 million jin of grain. The area of arable land in this prefecture accounts for only 7 percent of the total area of land. It was pointed out at the conference that all government organs and individuals are not allowed to enter the forest areas to purchase timber.

[Fuzhou Fujian Provincial Service in Mandarin 1035 GMT 21 Feb 80 HK]

GUANGDONG PINEAPPLE PRODUCTION--The total output of pineapples in Guangdong Province in 1979 reached 1 million tons, an increase of 50 percent over that in 1978. Zhanjiang Prefecture which accounts for one-fourth of the provincial pineapple output generally achieved a very good harvest in 1979. They plan to expand the planting area in the new season by 20,000 mu.

[Text] [Hong Kong ZHONGGUO XINWEN in Chinese 8 Feb 80 p 5]

GUANGDONG PREFECTURE FRUIT--Guangdong's Zhaoqing Prefecture is actively developing fruit production. At present the prefecture already manages more than 1,800 large and small orchards and has planted more than 367,000 mu of fruit trees such as lichee, mandarin oranges and tangerines. Some of these trees have already begun to bear fruit. Last year more than 2 million jin of mandarin oranges and tangerines were harvested. [Excerpt] [Hong Kong ZHONGGUO XINWEN in Chinese 19 Jan 80 p 2]

GUANGDONG OIL-BEARING CROPS--In 1979 the total output from oil-bearing crops in Guangdong Province increased more than 8 percent over 1978 the previous historically high year. Oils and fat sold to the state rose by more than 20 percent. The supply and demand relationship for grain and oil throughout the province has already been eased. In 1979 Guangdong readjusted crop distribution and changed a part of the low yielding rice paddies to peanut fields and implemented a peanut-rice crop rotation. Not only was there soil improvement but the output of peanuts rose. Last year Huiyang Prefecture expanded the land on which a peanut-rice rotation was used by 130,000 mu. Through the increased use of superior seeds and careful management, the total output of peanuts for the prefecture increased 17 percent over 1978. In Chenghai County the 1979 total output for the spring and autumn peanut crop rose 40 percent over that in 1978. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 19 Jan 80 p 1]

GUANGDONG SUGAR CRUSHING SEASON--At present every sugar mill in Guangdong Province, the foremost sugar producer in the country, has already entered the peak period of sugarcane crushing. According to statistics of 20 January 1980, the amount of sugarcane crushed is more than 3,697,000 tons which has produced more than 433,000 tons of sugar. The rate of sugar extraction is 12.9 percent, an increase of 1.9 percent over the previous crushing season. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 6 Feb 80 p 5]

GUANGDONG FARMLAND IMPROVEMENT -- Guangdong has vigorously improved lowyielding fields. Since last winter the province has thrown in more than 1 million laborers to improve 900,000 mu of farmland of which 500,000 has already been basically completed. Of Guangdong's 38 million mu of arable land, low yielding fields producing less than 800 jin of grain pur mu accounts for 15 million mu. These fields must be improved so that there can be an increase of a large margin. Last winter Guangdong set the improvement of low yielding fields as a major task. Since the fall of 1978 Foshan Prefecture has used more than 3.1 million yuan in capital and materials such as steel, wood, and cement to assist 28 communes in Zhongshan, Noumen, Kaiping, Taishan and Enping counties to improve 200,000 mu of low yielding farmland. The bumper harvest in 1979 was the second consecutive one. The more than 600 jin average per mu grain yield was raised to more than 800 jin. At the same time they combined improving low yielding fields with opening up more than 800 mu of fish ponds which made the masses very happy. This experience of Foshan has given rise to each area attaching importance to this work. Since the fall of 1979, every place throughout the province has popularized Foshan's experience. Many prefectures, in accordance with their manpower, material resources and financial resources, have emphatically grasped the improvement of low yielding fields insisting that it be done quickly and be of benefit this year. Foshan Prefecture plans to improve another 400,000 mu of low yielding fields. Since last it has involved 490,000 people in this work and at present has already improved 140,000 mu, an increase of 80,000 mu over the corresponding period in 1979. Each county in Shantou Prefecture has adopted a unified plan and the method of dividing up the construction so that more than 82,000 mu of low yielding fields have already been improved. Every county and commune in Zhaoqing Prefecture first worked on more than 100 prototypes such as improving mountain paddy fields and marshlands. Later this was widely popularized so that at the end of 1979 more than 58,000 mu of low yielding fields had been improved. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 26 Jan 80 p 11

GUANGZHOU JOINT ENTERPRISE--Guangzhou, 1 Mar--Two state farms and an orchard on the outskirts of Guangzhou have set up a joint enterprise to take charge of farm production, processing and sale of thear products as an experiment in reform of the system of economic management. Among the retail outlets operated by the enterprise are fruit stores, groceries, a restaurant and a The enterprise owns 600 hectares of farmland, an orchard covering snackbar. 130 hectares, and 820 hectares of forest. It has mechanized chicken and pir farms, fish breeding, food processing and fodder processing centres, farm machinery repair shops, electronics, medicinal drug and building materials plants. The new enterprise plans to grow more sub-tropical fruit trees, raise more cattle, pigs and poultry and expand its food production facilition by adding a meat packing plant and a bakery and enlarging a winery. It will also expand various other plants and establish more restaurants, fruit stores and other shops. [Beijing XINHUA in English 0726 GMT 1 Mar 80 OW]

GUANGXI 1979 HARVEST FIGURES--In 1979 the Guangxi Zhuang Autonomous Region achieved a bumper harvest. Total grain output increased over 1978 by more than 900 million jin, an increase of more than 4 percent. Per unit yield increased 9 percent over that in 1978. Both total output and per unit yield set new historical records. Cassava increased nearly 30 percent over that in 1978, rapeseed oil by 220 percent and fruit by nearly 10 percent. On a basis of a large increase in 1978, the 1979 estimated sugarcane output remains attainable. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 31 Dec 79 p 5]

GUANGDONG JANUARY COLD DAMAGE--This reporter learned from the concerned areas that the recent cold wave which invaded our province caused definite damage to agricultural production. After a cold wave entered our province on 29 January, the temperatures in every area dropped. Within 24 hours the temperature fell 11 to 15 degrees Centigrade. In the small hours of 31 January snow fell throughout Meixian and Shaoguan prefectures. The cold wave brought rain and snow alleviating the long period of dryness which began with the onset of autumn. But, because of the low temperatures, the sustained time period and the strong north wind, definite damage was done to agricultural production. Overwintering crops were affected to differing degrees. A considerably large portion of the winter potatoes in Zhaoqing Prefecture and the northern mountainous area of Shantou Prefecture suffered comparatively severe freeze damage. Every area in which the wheat was in the process of heading and flowering will be strongly affected. About 6 million jin of seed grain had been sown before "Spring Begin" [about 5 February]. A small part of these seedlings were freeze damaged. But, because each area attached importance to doing anti-cold work well, losses were reduced. It is predicted that in 3-5 days, temperatures will gradually rise again ending the freezing weather. The average daily temperature for Guangzhou Municipality will gradually rise from 9.4°C on 11 February to more than 12°C. [Text] [Guangzhou NANFANG RIBAO in Chinese 12 Feb 80 p 1]

GUANGZHOU COMMUNE, BRIGADE ENTERPRISES—In 1979, the total output value of the commune and brigade enterprises in suburban Guangzhou was 130 million yuan, an increase of 6 percent over 1978. There were 20 brigades with total output value reaching 1 million yuan, and 5 communes with total output value reaching 10 million yuan, accounting for one-third of the total number of communes in the suburban areas. [Guangzhou Guangdong Provincial Service in Mandarin 2330 GMT 4 Feb 80 HK]

SPRINKLER IRRIGATION SYSTEM--In 1979, the peasants in Guangdong popularized the new technology of sprinkler irrigation. A total of 4,000 sets of sprinkler equipment was set up throughout the province, covering an area of 180,000 mu. Both the number of sprinkler sets and amount of sprinkler irrigated area increased by 3 times over 1978. [HK010746 Guangzhou Guangdong Provincial Service in Mandarin 2330 GMT 22 Feb 80 HK]

GUANGXI PREFECTURE SUGARCANE OUTPUT -- In 1979 Guangxi's Nanning Prefecture had a bumper sugarcane harvest. Since the beginning of the crushing season which began at the end of last year, the 20 large, medium and small sugar mills in the prefecture all had a sugar extraction rate of over 12 percent. The sugar output for the entire crushing season will be more than 175,200 Nanning Prefecture is an important sugarcane producing area in Guangxi. The sugarcane growing area, the amount of raw sugarcane, and the output of sugar all account for more than one third of the total sugarcane area, the total output of sugarcane and cane sugar. Annually the amount of white sugar sold to the state is more than 100,000 tons. Since 19/8 each county in the southern part of the prefecture has established a sugarcane production base to promote the development of sugarcane. Last year more than 604,000 mu of sugarcane was planted in the prefecture. In order to carry out sugarcane production well, each county in Nanning Prefecture last year seriously implemented the economic policy, raised the procurement price of raw sugarcane and carried out the policy of incentives for selling sugarcane so that the enthusiasm of the broad masses of peasants was fully mobilized. Last year Yongning County which has the largest sugarcane area in this prefecture planted more than 170,000 mu with a total output increasing more than 19 percent over that in 1978. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 29 Jan 80 p 4]

ANIMAL HUSBANDRY--Guiyang, 2 Mar--Guizhou rapidly developed animal husbandry in 1979 with good results. According to statistics compiled by the departments concerned, at the end of 1979, the number of pigs in sties increased 9.3 percent compared with the corresponding period of 1978; the number of cattle and horses rose by 2.3 percent, and beef cattle procurement in 1979 by 20,000 head over 1978; the number of penned goats and sheep rose by 10.6 percent, and mutton sheep procurement in 1979 by some 210,000 head over 1978. The production of other livestock, rabbits and honey has also gone up by varying degrees. [OWO31041 Beijing XINHUA Domestic Service in Chinese 0349 GMT 2 Mar 80 OW]

HEBEI 1979 AGRICULTURAL FIGURES--After overcoming a severe drought, Hebei achieved a bumper harvest in 1979. According to initial statistics, the total grain output reached 34.1 billion jin, an increase of 400 million jin over the bumper harvest of 1978. Total outputs of cotton and oil increased 8 and 23 percent, respectively, over that in 1978. Live hogs on hand increased 19 percent over 1978. Dried and fresh fruit rose by more than 14 million jin over 1978. Total agricultural income increased by 400 million yuan over 1978. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 31 Dec 79 p 5]

HENAN WINTER WHEAT--This year Henan's sown wheat area is 62 million mu. After last year's breakthrough of 20 billion jin of summer grain, the total output of wheat must make a new breakthrough. But due to natural disasters, a large part of the wheat seedlings are weak and yellowed, there is little tillering and generally the seedlings are not the same as in previous years. However, due to strengthened leadership, there has been a new improvement in the management of wheat. At present more than 30 million mu has received a winter irrigation, more than 7 million mu has been irrigated twice and more than 40 million mu has been top dressed. [Excerpts] [Beijing RENMIN RIBAO in Chinese 18 Feb 80 p 1]

HENAN RURAL GRAIN RATIONS -- Henan Province, which historically has had low yields and many disasters, last year achieved a bumper grain harvest. majority of peasants in the province have a per capita grain ration for the whole year exceeding 500 jin. Last year the total grain output for Henan created a new historical high. In accordance with actual conditions each locality in the province gave consideration to everything, made arrangements for disasters and were able to allow the peasants more and better food. The majority of the communes and brigades in the counties of Xinxiang, Qinyang, Bo'ai and Wen which last year had an average per mu grain yield which exceeded 1,000 jin distributed a grain ration of more than 450 jin to each commune member. Adding to this, the grain from private plots, the incentive grain for agricultural sideline products and the reward grain for excess production, the actual average per capita grain ration exceeded 600 jin. The counties of Fan, Changyuan, Lankao, Fengqui and Kaifeng which are infamous old disaster areas along the banks of the Huang He had in the past gone through severe grain shortages and had to eat grain brought in from more than 20 other provinces. Last year the counties increased production and the majority cast off the cap of "grain shortages." The Henan CCP Committee adopted a policy of preserving the peoples' health and reduced the state grain procurement quotas so that there was a comparatively large increase in the grain rations for these commune members. [Text] [Hong Kong ZHONGGUO XINWEN in Chinese 20 Jan 80 p 2]

FARMLAND CONSTRUCTION—The number of laborers who have been taking part in the farmland capital construction in Henan has increased from 4 million in mid-January to 5.3 million. In Xinxiang Prefecture 3,000 cadres are working in the first line of farmland capital construction together with 600,000 laborers on 6,000 projects with 4,500 projects already completed. In Nanyang Prefecture, 164 mechanical wells have been sunk in Deng County. Some 211 old wells have also been repaired in this county. A total of 940,000 mu of wheat has been irrigated, surpassing the plans by 26 percent; in Anyang Prefecture, 4.1 million mu of wheat has been irrigated, accounting for 83 percent of the plans. [Zhengzhou Henan Provincial Service in Mandarin 1130 GMT 23 Feb 80 HK]

AGRICULTURAL ATOMIC ENERGY—The Hubei Agricultural Scientific Institute has applied atomic energy technology to agricultural research since 1960, using radiation to cultivate seed strains of wheat. Output of these seed strains is 20-percent higher than other seed strains. These seed strains can also resist cold spells, heat and insects. In 1975, these seed strains were regarded as the standard variety for wheat production. At present, 1,000 mu of such wheat has been popularized in Hubei. This achievement was rewarded by the national science conference. Recently, the institute also cultivated with radiation new seed strains of early rice and late rice with promising results. [HK121013 Wuhan Hubei Provincial Service in Mandarin 1100 GMT 9 Feb 80 HK]

HUNAN FARMLAND CAPITAL CONSTRUCTION—By the end of January 1980, the people in Hunan had completed farmland capital construction projects in 116,000 areas, moving 510 million cubic meters of earth and stone. They had completed construction of 1,100 large, medium and small reservoirs, built and improved 50,000 dams and increased the power of electric irrigation units by 22,000 kilowatts, thus increasing water storage by 150 million cubic meters. They had also built 3,100 kilometers of flood prevention channels, increased the amount of sprayed irrigated farmland by 367.000 mu, increased the installed electricity capacity in the small hydroelectric power stations by 65,000 kilowatts and improved or added irrigation facilities on 2.06 million mu. By mid-January, they had cultivated 9.478 million mu of tree seedlings, planted 8.279 million mu of trees, and developed 1.41 million mu of land for afforestation. [HK280146 Changsha Hunan Provincial Service in Mandarin 1100 GMT 20 Feb 80 HK]

EDIBLE OIL PROCUREMENT--Hunan has procured 1.23 million dan of edible oil, overfulfilling the state's 1979 purchasing plans by 17.1 percent. This is an increase of 530,000 dans over 1978. [Changsha Hunan Provincial Service in Mandarin 2315 GMT 22 Feb 80 HK]

COTTON SOWING--Hunan has basically completed its tasks to readjust the distribution of cotton fields before the spring festival. Most of the places implemented their cotton cultivation plans. As a result of the readjustments, the major cotton-growing areas in Changde and Yueyang prefectures increased their cotton-growing areas by 340,000 mu, while the scattered cotton-growing areas in western and southern Hunan reduced their cotton-growing areas by 315,000 mu. In addition, all the different areas also carried out various necessary adjustments. Hunan has still maintained its total cotton-growing areas at about 2.5 million mu, while its areas of concentrated cotton fields have increased by 500,000 mu compared with last year. This has preliminarily changed the situation in which Hunan's cotton fields were too scattered. In the readjustment of the distribution of cotton fields, the Hunan Provincial People's Government has appropriated 300 million jin of grain rations for readjusting the grain procurement tasks in the cotton-growing areas and solving the problem regarding the food grain supply to the cotton producing peasants, [Changsha Hunan Provincial Service in Mandarin 2315 GMT 27 Feb 80 HK]

DOUBLE CROPPING, TRIPLE CROPPING SYSTEMS DISCUSSED

Beijing GUANGMING RIBAO in Chinese 14 Oct 79 p 2

[Article by Yang Ruichun [2799 3843 2504] and Zheng Lizhi [6774 0536 1807] of the Jiangsu Provincial Grain Bureau: "The Double Cropping and Triple Cropping System as Seen From an Examination of Costs for Farm Produce and From the Means of Grain Distribution"]

[Text] After many years of implementation of the double cropping and triple cropping system in Jiangsu Province, just how is the double cropping and triple cropping system faring? Practice is the sole criterion for the examination of truth. After many years of practice, a study of the merits and demerits of the double cropping and triple cropping system in the seeking of truth from facts permits an accurate conclusion without much difficulty. We are workers in grains. From an examination of the production costs for farm produce (hereinafter shortened to farm costs) and contact with the means of grain distribution, we would like to discuss our views on the double cropping and triple cropping systems.

Enlightenment Gained From Investigation Data About Farm Costs

Not long ago when we were compiling cost data about grain oil production in 1978 involving 118 farm cost fact-finding points in 55 counties in Jiangsu Province, we discovered that rapid development had occurred in the area planted to hybrid rice. In 1978 the area planted to hybrid rice amounted to about one-fourth the total indica rice area, and a doubling and redoubling has occurred this year over last. Moreover, the area of double cropping of early rice has experienced a commensurate reduction with 1 million mu less this year than last. On the basis of farm cost data collected from 26 production teams in 9 counties of Zhenjiang Prefecture, where hybrid rice began to be planted early, cultivation of hybrid rice is more profitable than double cropping of rice. Average per unit yields from double cropping of rice in these 26 production teams was 1,088.3 jin, which was 224.4 jin more than for hybrid rice. However, when the 49.8 jin more seeds that were used are deducted, actual grain realized was only 122.2 jin more, while expenses increased by 25.83 yuan; labor employed increased by 34.2 standard work days; per mu total costs amounted to 52.72 yuan; and net earnings per mu declined

by 19.55 yuan. If summer grain crops are factored in, an increased yield of only 4,4 jin of end product grain is realized from three crops as compared with two crops, and net income per mu is less by 38.53 year. This is to say that every jin of end product grain harvested costs 8.77 year. In order to clarify this problem, we ran a comparative analysis with one production team producing double cropped rice and another production team producing hybrid rice in Wulin County, where the area planted to hybrid rice is quite extensive. A look at the autumn grain production of these two teams shows that end product grain from double cropping as compared with the hybrid fields was 6.7 jin more versus 124.7 jin more, but net earnings per mu decreased by 32.02 yuan and 22.97 yuan respectively. In the case of per unit yields for three crops versus two crops over the entire year, the one production team had a decline of 79.1 jin in its harvest of unprocessed grain, while the other showed an increase of 56 jin in its harvest of unprocessed grain, but when converted into finished grain there was a reduction of 243.9 jin and 9.1 jin respectively. Net earnings declined by 65.58 yuan versus 4.79 yuan respectively. Both finished product grain and net earnings figures showed that there was actually a decline in yield and a decline in income with three crops versus two crops. From the standpoint of cost effectiveness, the losses actually outweighed the gains in the double and triple cropping systems. Consequently there has been a great tendency for hybrid rice to replace double cropping of rice.

Changes That Have Occurred in the Development of the Double and Triple Cropping Systems and the Distribution of Grain

The outcome of reforms to the farming system was intended to be both an increased contribution to the state and benefits in the strengthening and consolidation of the collective economy, and improvements in the livelihood of the peasantry (including grain for consumption and economic income) so that the state, the collective, and the individual would all benefit. Was this the actual case in each place following development of the double and Triple cropping system? Take the means of grain distribution in Suzhou Prefecture during 1976 and 1977, for example. The multiple cropping area for grain throughout the prefecture in 1976 was 30 percent greater than 1t had been in 1966, with early maturing rice occupying more than 3 million more than in 1966. Harvest for this year was about normal with the grain crop for the whole year totaling 1.3 million jin more than in 1966 while state requisition purchases had increased by less than 130 million jin or only onewith the increased amount. The commodity rate declined from 1966 state requisition purchases of 39.2 percent of total yield to 34 percent of total yield in 1976. In 1976, the commodity grain provided the state by each person engaged in farming was less by 52 jin, on average, than in 1966. The amount of seed grain left for collective use in 1976 increased by almost 340 million in, or in excess of one-quarter of the total increase in yield. The average amount of grain for consumption by an individual commune member in 1976 was only 2 jin more than in 1966. These figures reflect that though increases occurred here in 1976 over 1966 as a result of the growth of the double and triple cropping system, the contribution to the state was not great (on the contrary there was a decline in the average per individual supply of commodities and, moreover, owing to a change in the varieties of unprocessed food grains going into storage, the ratio of end product polished rice and its edibility caused a decline in the use rate); the increased amount of seeds left for collective use itself represented an increased expenditure of more than 30 million yuan; and there was practically no increase in grain consumption by commune members. This was only a change in the amounts distributed; changes in the variety of grains and quality became greater after changes were made in the farming system. For example, early indica rice, whose quality was poor and for which the ratio of polished rice derived was low, amounted to only 9.1 percent of the total yield of autumn grain in the 1966 output, but in 1967 it climbed to 45.6 percent of the total production of autumn grain. The varieties of grain for which the state made requisition purchases for storage were comparable in 1976 and 1966, but the amount of barley increased by more than 200 billion jin, and the amount of wheat decreased by close to 100 million jin. Indica rice, of high quality at the time of storage and from which a high proportion of polished rice could be derived, declined from an original approximate 80 percent of the total amount of paddy rice to about 20 percent, while early indica rice increased by more than 1 billion jin in 1976 as compared with 1966, resulting in a big change in varieties requisition purchased by the state with increases in barley and early rice and decreases in wheat and late rice. Since a decrease has taken place in the sale to the state by production teams of high price varieties of grain with an increase in low price varieties, even though almost 130 million jin more of grain was sold in 1976 than in 1966, income from grain sales declined by about 15 million yuan. Because a great decrease occurred in the amount of requisition purchases by the state of late indica rice for storage, the whole situation in varieties was affected. Allocations to other places were affected, as were supplies of indica rice to some cities. Meanwhile, since more than 1 billion iin of early indica remained in rural villages, most of which had been distributed to commune members for consumption, commune members supposedly received an increase of 2 jin of grain per person for consumption when, in fact they had less end product rice to eat, because every 100 jin of early indica rice yielded between 4 and 5 jin less of polished rice than did the former late indica rice harvested as a single crop. The above situation in grain distribution shows that in Suzhou Prefecture the spread of the double and triple cropping system brought little advantage to the state, the collective or the individual, and so it is no wonder that the masses did not take to the double and triple cropping system.

A Little Discussion With a Comrade Who Emphasized Grain Production

Grain production is the foundation for grain distribution. It stands to reason that when grain production increases, distribution will be more active. But this is not entirely the way it is in actual practice. Some comrades who stress grain production have a one-sided view of "increased production." They care only for changes in per unit yields and simplistically use per unit yields as the basis for reforms in farm methods and as the sole criterion for whether the balance in production is good or bad. In discussing awards and designating models, they look only at whether per unit production was high or low. As for the relationship among total grain yields, quality, and

distribution as well as the contribution made to the state, they rarely give it sufficient attention. Some places know the trick of "maintaining per unit yields in an area" and make no effort to try to get "high yields." As a result, when they hear that per unit yields will please, they ask about the varieties that will startle, but when they figure the cost it will frighten. and when they look at the contribution and the benefit it will enrage; this is, in fact, a self deception. Amount of yield, quality and contribution must be part of a piece, but some comrades look only at the harvest, do not care about expenditures, and some even use seeds in amo nts that exceed the "increased yield." The unprocessed grain may sometimes look as though there has been an increased harvest, but when converted into end product grain it turns out to be a decrease. They suppose that the harvest of 400 jin of barley represents more than a 10 percent increase over the harvest of 350 jin of wheat, and that they have made a great achievement. Actually once the grains have been ground into flour, there is more than 280 jin of barley flour versus more than 290 jin of wheat flour, and not only is the amount of barley flour less, but the quality and the edible value and economic value have all declined. But often comrades who stress production do not understand this arithmetic, and they ignore the fact that when production costs go up, economic benefits go down. Take a comparison of the summer grain harvests of 1976 with those of 1970 in Suzhou Prefecture, for example. Because of the spread of the system of double and triple cropping, more than 1.5 million mu of wheat lands were converted to the growing of barley, and the summer grain harvest for that year increased by 17.83 million jin over 1970, but total output value conversely decreased by 8.468 million yuan. Some hilly areas and sandy soil areas are suitable for the cultivation of maize, soybeans, and evert potatoes as early crops, and in a single season as much as 400 500 jin of maize, and soybeans for between 2 and 3,000 jin of fresh sweet potatoes may be harvested, but some comrades insisted that a change be made to rice cultivation. As a result, sometimes the rice harvest would not cover costs; and sometimes though a few score more jin of paddy might be harvested than of the other crops, considering the excess use of seeds and when converted to the amount of usable grain in the end product, there had been a loss of a few score of grain. The farmers are well aware of this situation of increased itelds and reduced income or reduced yields and reduced income, and we comrades who stress grain production are very conscious of it too, but it is like "the emperor's new clothes" (an Anderson children's story) in that we lack the murage to speak the truth. We hold that whether or not a farming system is mitted to a prace must be looked at in production terms from the standpoint a combination of the tilling of the soil and the nurture of the soil, and that under normal circumstances it should be possible to achieve increased vields in a single season, increased yields throughout the year, and increased yields every year. As applied to grain crops, this means that yields must ie high (meaning the net harvest after the seeds used to grow the crop have teen subtracted), that the quality must be good (fairly high ratio of end product, edible value, and utilization value), that work input be small, expenses reasonable, farm costs low, earnings high, and contribution great (high commedity rate). In the distribution of grain, the welfare of the state, the collective, and individual must be reflected and cared for. What is meant by the overall situation? We feel that only the test of practice that accords with the welfare of the totality of the state, the collective and the individual can e called a real overall situation. And reforms to the farm system cannot, of course, be an exception. 26

COMMUNE, BRIGADE ENTERPRISES--Jiangsu Province's commune- and brigade-run enterprises have made great progress in the adjustment of the national economy. Their output value in 1979 reached 7.35 billion yuan, more than 17 percent greater than 1978. Their progress was attributable to the various methods they carried out in accordance with the market demands for newer and larger varieties of products. [Nanjing Jiangsu Provincial Service in Mandarin 1100 GMT 26 Feb 80 OW]

SHAANXI DROUGHT CIRCULAR--The Shaanxi People's Government issued a circular on 15 January, which demanded that all areas persistently fight drought for a long time and reap a bumper harvest of agriculture in summer. The circular pointed out that very great achievements have been scored in winter field management centered on resisting drought. Some 8.6 million mu of summer-harvested crops have been irrigated in winter. According to weather forecasts, there will be little spring rain in Shaanxi. A serious situation of drought in both winter and spring may occur. It is necessary to try by every way possible to increase the irrigated areas and strive to achieve high output from the existing farmland. This is the key to reaping a bumper harvest of agriculture in summer. [Xian Shaanxi Provincial Service in Mandarin 1100 GMT 20 Jan 80 HK]

LANTIAN COUNTY AGRICULTURE—The total output of grain in Lantian County in 1979 was 300 million jin, an increase of 12.9 percent over 1978. The people in this county have also planted 50,000 mu of trees in 1979. Income from the commune and brigade enterprises and diversified economy accounted for 40 percent of the total income from agriculture. This is a one-fifth increase over 1978. Savings of the commune peasants reached 1.24 million yuan. [Xian Shaanxi Provincial Service in Mandarin 1100 GMT 11 Feb 80 HK]

PESTICIDE DEVELOPED--Shanghai, 1 Mar--A new antibiotic pesticide, jinggangmycin, has been given an award by the Shanghai Municipal Government for its remarkable effectiveness in controlling sheath and culm blight in rice. Jinggangmycin was developed by the Shanghai Pesticide Research Institute from a new strain of microbe found in the soil of the Jinggang Mountains in Jiangxi Province in 1974. Compared with the conventionally used zinc methyl arsenate, the new antibiotic is more effective, harmless to men and animals and does not leave toxic residue in the crop. It can be applied before or after the occurrence of the disease. The Shanghai Pesticide Research Institute has improved the fermentation method and has introduced technology which increases efficiency and reduces costs. Jinggangmycin has been put into mass production in dozens of pesticide plants across the country. [Text] [Beijing XINHUA in English 0724 GMT 1 Mar 80 OW]

MARKET MEAT SALES—Chengdu, 5 Mar—China's southwestern province of Sichuan, with one-tenth of the country's population, sold 1,550,000 tons of pork, mutton, beef and chicken, duck, goose and hare in 1979 topping the previous year's quota by 28 percent, according to statistics. With a rapid increase of animal products, more meat has been sold in markets in these years. In the city of Chongqing, which has a population of 6 million, consumption per head averaged 35 kilograms last year, four times as much as in 1952. This registered a record in the past 30 years. Besides fresh meat, various kinds of salted and cured meat were sold in the city. According to incomplete statistics, the province raised 65,300,000 pigs, sheep and cattle. This is an increase of 5.3 percent over 1978. [Text] [OWO51139 Beijing XINHUA in English 0721 GMT 5 Mar 80 OW]

MEAT SUPPLY INCREASES--Chengdu, 2 Mar--Sichuan rapidly develops animal husbandry in its rural areas, thereby improving market meat supply. According to preliminary statistics, in 1979, Sichuan had a total of 65.3 million head of pigs, sheep and cattle, topping 1978 by 5.5 percent. In 1979, 26 million head of pigs were sold, showing a 30-percent increase over 1978. In addition, 540,000 head of beef cattle and 4.06 million head of mutton sheep were sold in the same year. Total meat production amounted to some 3.1 billion jin, up 28 percent over 1978. [Beijing XINHUA Domestic Service in Chinese 0346 GMT 2 Mar 80 OW]

TIANJIN 1979 HARVEST INCREASES—In 1979 Tianjin Municipality victoriously overcame spring cold and autumn drought to achieve an all-round bumper harvest. The total output of grain and the per unit yield increased more than 10 percent over 1978. The total output of oil-bearing crops such as peanuts and sesame increased more than 30 percent over that in 1978. The production of vegetables was as good as previous years basically satisfying the needs of the municipality's population. The output of fruit, cows milk and chicken eggs also had varying degrees of increase. [Text] [Hong Kong ZHONG-GUO XINWEN in Chinese 31 Dec 79 p 5]

XINJIANG 1979 RURAL FIGURES -- In 1979 each area, namely agriculture, forestry, animal husbandry, sideline occupations and fisheries, in Xinjiang Uygur Autonomous region had an all-round increase in production. The total output of grain was nearly 7.7 billion jin, nearly a 4 percent increase over that in 1978. The output of oil-bearing crops and sugar beets increased 18.16 and 6.6 percent, respectively, over 1978. The total output of long staple cotton reached 300,000 dan which is the highest produced in any one year since liberation. In the domestic animal area 1979 was the third consecutive bumper year. At the end of the year the number of domestic animals on hand reached 25.33 million head, an increase of 2.5 percent over that in 1978. The development of forestry in 1979 greatly exceeded the previous year. The area afforested for the whole year was 270,000 mu. More than 100 million trees were planted. In the past year, Xinjiang's fish production and the commune and brigade-run enterprises also had a comparatively fast development and achieved gratifying results. The total income of the region's commune and brigade-run enterprises reached 260 million yuan, an increase of more than 30 percent over that in 1978. [Excerpts] [Hong Kong ZHONGGUO XINWEN in Chinese 31 Dec 79 pp 6-7]

XIANCYUN COUNTY AGRICULTURE—Xiangyun County has frequently experienced drought and other natural disasters. Despite the great improvements that have been made since liberation, output of grain is low and unstable. In 1977, the total output of grain in the county was 97.44 million jin. In 1978, the total output of grain increased to 152.03 million jin, surpassing the highest level ever recorded. This is an average increase of 163 jin for each person. In 1978, the output reached 177.95 million jin, giving an increase of 74 jin to each person. It is expected that each commune member will receive 56 yuan from the distribution, an increase of 27 percent over 1978. The people in this county in 1979 had also delivered 26,000 pigs to the state, an increase of 9.9 percent over 1978. By 1977, the total capacity of the reservoirs in the county was 127 million cubic meters. [Kunming Yunnan Provincial Service in Mandarin 1100 GMT 25 Feb 80 HK]

RAPE PRODUCTION--The people in Yunnan have overfulfilled the purchasing tasks of rape for 1979. The areas sown to rape in 1979 were increased by 160,000 mu, producing 9 million jin of oil and fat. A total of 17.22 million jin of oil and fat were purchased in 1979, overfulfilling the plans by 210,000 jin. [HK010438 Kunming Yunnan Provincial Service in Mandarin 1100 GMT 25 Feb 80 HK]

CADRE TRAINING--Zhejiang Province's first training class for leading agricultural cadres graduated on 21 January in Jinhua. During the 3 and 1/2 months of training, 48 prefectural party committee secretaries, leading cadres of county agricultural departments and responsible persons of prefectural agricultural schools or agricultural research institutes from Zhejiang's farming regions systematically studied scientific and technological knowledge in farming. [Hangzhou Zhejiang Provincial Service in Mandarin 0400 GMT 2 Feb 80 OW]

AFFORESTATION ENCOURAGED--The Zhejiang Provincial People's Government on 29 February issued a circular on afforestation. The circular calls on all localities to seize an opportune time in the spring to plant trees on barren mountains, near villages, along roads and streams, by houses and in cities and towns. It stresses the policy that whoever plants the trees owns them, be it the state, a commune or a production brigade. The circular urges people to abide by the Forestry Act of the People's Republic of China and make efforts to protect forests. [OWO41037 Hangzhou Zhejiang Provincial Service in Mandarin 1100 GMT 2 Mar 80 OW]

SHEEP HIDES, RABBIT FUR PRODUCTION—Zhejiang Province earned more than \$30 million in 1979 from the 1.31 million yellow sheep hides and 1,476 jin of rabbit fur it procured from its base counties that produce such hides and fur for export. With the approval of the provincial planning commission, the province established seven base counties for producing yellow sheep hides and 25 base counties for producing rabbit fur in February 1979. [Hangzhou Zhejiang Provincial Service in Mandarin 1100 GMT 27 Feb 80 OW]

PUBLICATIONS

II. PUBLICATIONS
TABLE OF CONTENTS OF GUIZHOU NONGYE KEJI', JANUARY 1979
Guiyang GUIZHOU NONGYE KEJI [GUIZHOU AGRICULTURAL SCIENCE AND TECHNOLOGY] in Chinese No 1, 20 Jan 79 inside front cover
[Text] Types, Causes, and Techniques of Prevention and Control of Rice Seedling RotGu Guanqun [7357 0385 5028]
Summarization of High Yield Culture of Nanyou No 2 in Yunnan-Guizhou PlateauZhang Ben [1728 2609] of Seed Station, Jinsha County Bureau of Agriculture
Observation of Meitan Hild RiceLu Peifan [4151 1014 0416]. Zeng Jenhua [2582 2429 5478] Hu Yongliang [5170 3057 5328] of Rice Group, Guizhou Provincial Academy of Agricultural Sciences
Epidemiological Principle of Wheat Scab Fungus 1976-78 and a Study on the Forecasting TechniquePlant Protection Group, Guizhou Provincial Academy of Agricultural Sciences
Qiandanhao Corn Single Cross Breed and the Technique of Seed Production By Propagation of Parent Inbred LineDry Crop Group, Guizhou Provincial Academy of Agricultural Sciences
A Study on the Problem of Different Planting Time in Hybridization of RiceXia Xueyuan [1115 1331 3220] of Suiyang County Bureau of Agriculture
Opinions Concerning Reasonable Application of Urea Chemical FertilizerMiao dishi [5379 0366 4311] of Soil and Fertilizer Group, Guizhou Provincial Academy of Agricultural Sciences
Brief Introduction of an Early Maturing Superior New Grouping of Hybrid Rice, Thenshan 97A x Zhabadannan Autonomous Prefecture Institute of Agricultural Sciences
Grain Yield Increase Potential in Terms of Heterosis Utilization Ruqi District Agricultural Extension Station, Suiyang County

Preliminary Report of Observation of Damage by Rape Flea Beetle [Psylliodes punctifrons Baly]Wen Pan [3306 3382] of ciannan Autonomous Prefecture Institute of Agricultural Sciences38
Preliminary Report of Selective Breeding of Nanxian No 1 Sterile Line Chen Kinyuan [7115 2450 0337] of Wangmo County Agricultural Technology Station
Practice Scientific Farming, Over One Ton Yield of Grain Per Mou in Dual-Crop of Rice and Theat Huayan District Agriculture Extension Station, Anshun County
Introduction of a Technique of Cultivating Red Vetch [Vicia hirsuta] Seedlings With Plastic Thin FilmSinan County Agriculture Extension Station
Preliminary Report of Selective Breeding of Zhongfeng [A Breed of Honeybes]Zhuang Dean [8369 1795 1344] of Horticulture Group, Guishou Provincial Academy of Agricultural Sciences45
Rules Concerning Manuscripts Submitted to GUIZHOU NONGYE KEJI for Consideration
AP Invitation to Subscribe to LIAONING NONGYE KEXUE [LIAONING AGRICULTURAL SCIENCE] A Bimonthly
GUITMOU NONGYE KEJI Becomes an Official Domestic Publication [Begins to be for Sale and Ceases to be for Free Distribution]b.cover
6168

PUBLICATIONS

TABLE OF CONTENTS OF 'GUIZHOU NONGYE KEJI', APRIL 1979	
Guiyang GUIZHOU NONGYE KEJI [GUIZHOU AGRICULTURAL SCIENCE AND TECHNOLOGY] in Chinese No 2, 20 Apr 79 inside front cover	
[Text] Studies on the Problem of Breeding High Photo-Efficiency Crops Liu Zhenye [0491 2182 2814] Ma Depeng [7456 6671 7720]	
Cao Shufen [2580 3219 5358] of Guizhou College of Agriculture	.1
Sensitivity of Sterile Line to Low Relative Temperature During Blooming TimeTang Hongjun [3282 7703 6874] of Changshun County	
Science Committee	.8
Research on the Principle of Occurrence and Technique of Forecasting of Wheat Powdery MildewPlant Protection Group, Guizhou Provincial Academy of Agricultural Sciences	14
cial Academy of Agricultural Sciences	14
Yield Increase Effect of Boron Spray on RapeDing Zhenguo [0002 2182 0948] of Jiangkou County Institute of Agriculture	18
Preliminary Report of Toxicity Determination of Shachongshuang [sodium thiosulfate ?] and Shamingdan [Cartap, Paden] to Newly Hatched Larvae of Rice Borer [Schoenobius incertellus Walker] Chen Zhihao [7115 0037 3185] He Zhanxiang [0149 0594 4382] Yuan Sixin [7086 1835 2450] of Plant Protection Group, Ghizhou Provincial Academy of Agricultural Sciences	22
All Out Application of Technical Measures To Obtain High Yield of SeedsMeitan County Bureau of Agriculture	31
Understandings and Important Points in the Cultivation Technique of Dual-Season One-ton Yield Grain FieldYang Zhengkui [2799 2793 7608] of Leyuan District Agriculture and Animal Husbandry Comprehensive Station, Wangmu County	33
Summarization of High Yield Experience in Intercropping Sugar Cane, Grain, and Oil in Sinan CountySinan County Bureau of Agriculture	37

Preliminary Report of Application of Vitro Culture in Paddy Rice BreedingMo Yunchuan [5459 7291 1557] of Zhanfeng County
Bureau of Science and Technology; Zhang Huichuan [1728 1920
5425] of Zhenfeng County Bureau of Agriculture40
Comprehensive Technique of Prevention and Control of Apple Root RotTian Weishu [3944 4850 3210] of Third Brigade, Zhongba Tea and Fruit Orchard
Study on the Fine Tube Freezing Technique for Water Buffalo Seminal
FluidAnimal Breeding Station, Guizhou Provincial Research
Institute of Animal Husbandry and Veterinary Medicine43
Brief News of the Provincial Conference on Soilless Seedling Culti-
vation in Greenhouses53
References of Foreign Agricultural Scince and Technology and Brief Reports of Modern Science and Technology
Effects of Acetic Acid, Propanoic Acid, and Butyric Acid on the
Growth of Rice SeedlingsD. Niranjan Rao, D.S. Mikkelsen48
Boron Fertilizer Should be Sufficiently Applied but Not in Excess
John E. Bowen
Modernization of Agricultural Science and Technology28
Cytogenetics and Breeding46
Importance of Biological Nitrogen Fixation
Combined Use of Several Analysis Instruments45

6168 CSO: 4007

END

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*Cover-to-cover

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